

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF RHODE ISLAND

PAUL BOWARY, M.D.,

Plaintiff,

v.

UNITED STATES MEDICAL LICENSING
EXAMINATION, NATIONAL BOARD OF
MEDICAL EXAMINERS, and THE
FEDERATION OF STATE MEDICAL
BOARDS OF THE UNITED STATES, INC.,

Defendant.

Case No. 1:21-cv-00278-JJM-LDA

DECLARATION OF CAROL MORRISON, PH.D.

1. My name is Carol Morrison. I am a Principal Psychometrician at the National Board of Medical Examiners (“NBME”). Unless otherwise stated, I have personal knowledge of the facts stated below, based on my work at NBME and my review of company records maintained in the ordinary course of business, as referenced below.

2. Psychometrics is the theory and technique of psychological measurement, focusing on the measurement of knowledge and skills through testing. In the case of NBME, psychometric theory and principles are applied to test the scientific and clinical knowledge of medical students and physicians.

3. The United States Medical Licensing Examination (“USMLE”) is a three-step examination assessing a physician’s ability to apply knowledge, concepts and principles, and to demonstrate fundamental patient-centered skills, that are important in health and the treatment of diseases, and that constitute the basis of safe and effective patient care.

4. Step 3 of the USMLE assesses whether the examinee can apply medical knowledge and understanding of biomedical and clinical science essential for the unsupervised practice of medicine, with emphasis on patient management in ambulatory settings. It is the final examination in the USMLE sequence leading to a license to practice medicine without supervision.

5. When an examinee takes a Step exam, the examinee's test data is delivered electronically to NBME. An examinee's item responses are converted into a raw score (the sum of the points earned from correct responses). A secondary scoring system is used to verify scoring outputs and verify that the two independent scoring systems are in agreement. The raw score is then converted into a three-digit score which is reported to the examinee and authorized score recipients.

6. Throughout the scoring process, analyses are performed to detect aberrant results, and final quality assurance procedures are performed to verify that a correct score report is produced.

7. According to NBME's records, Paul Bowary took the Step 3 exam two times, on April 8, 2018 and December 28, 2018.

8. When Dr. Bowary took the Step 3 exam on April 8, 2018, he received a failing score of 192. At that time, the minimum passing score for Step 3 was 196. Dr. Bowary's score of 192 ranked him at the 5th percentile, meaning that 95% of the examinees who took the Step 3 exam between January 1, 2018 and December 31, 2018 received a higher score than Dr. Bowary. A true and correct copy of Dr. Bowary's April 8, 2018 score report is attached at Exhibit A.

9. When Dr. Bowary took the Step 3 exam on December 28, 2018, he received a failing score of 178. At that time, the minimum passing score for Step 3 was 196. Dr. Bowary's

score of 178 ranked him at the 1st percentile, meaning that 99% of the examinees who took the Step 3 exam between January 1, 2018 and December 31, 2018 received a higher score than Dr. Bowary. A true and correct copy of Dr. Bowary's December 28, 2018 score report is attached at Exhibit B.

10. According to NBME's records, Dr. Bowary's score on the December 28, 2018 Step 3 exam was available to the candidate approximately three weeks after he tested. The USMLE Information Bulletin informs examinees that scores are usually available three to four weeks after testing, so Dr. Bowary's score on the December 28, 2018 Step 3 exam was available well within the normal time period for reporting scores to examinees.

11. If a USMLE examinee wishes to request a score recheck he may do so by following the instructions made available by the applicable test registration entity. The Federation of State Medical Boards is the registration entity for Step 3, and information regarding score rechecks is posted at <https://www.fsmb.org/step-3/>. The examinee must submit a written request for a recheck, and pay a fee for the recheck.

12. To date, no USMLE score has been changed for any examinee as the result of a score recheck.

13. If Dr. Bowary had requested a recheck of his April 2018 Step 3 score, my office would have conducted the recheck. We have no record of performing a recheck at the request of Dr. Bowary.

14. In response to this pending litigation, however, and Dr. Bowary's assertion that his Step 3 score was changed to a passing score following a recheck of his performance by NBME, my office conducted a recheck of Dr. Bowary's April 8, 2018 Step 3 score on July 21, 2021. We did not find any errors. The score that was officially reported to him for his April 8,

2018 exam -- 192 (a failing score) -- is the same score that he received when we conducted our recheck on July 21, 2021.

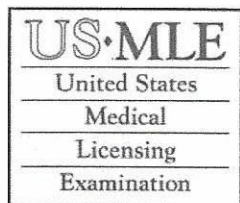
I declare under penalty of perjury that the foregoing is true and correct.

Executed on July 22, 2021.

—


Carol Morrison, Ph.D.

EXHIBIT A



UNITED STATES MEDICAL LICENSING EXAMINATION®

STEP 3 SCORE REPORT

This score report is provided for the use of the examinee.

Third-party users of USMLE information are advised to rely solely on official USMLE transcripts.

Bowary, Paul

USMLE ID: 0-899-284-4

Test Date: April 8, 2018

The USMLE is a single examination program consisting of three Steps designed to assess an examinee's understanding of and ability to apply concepts and principles that are important in health and disease and that constitute the basis of safe and effective patient care. Step 3 is designed to assess whether an examinee can apply medical knowledge and understanding of biomedical and clinical science essential for the unsupervised practice of medicine, with emphasis on patient management in ambulatory settings. The examination consists of two days: Day 1, Foundations of Independent Practice (FIP), assesses an examinee's knowledge of basic medical and scientific principles essential for effective health care; Day 2, Advanced Clinical Medicine (ACM), assesses the examinee's ability to apply comprehensive knowledge of health and disease in the context of patient management and the evolving manifestation of disease over time. Results of the examination are reported to medical licensing authorities in the United States and its territories for use in granting an initial license to practice medicine. This score[§] represents your result for the administration of Step 3 that began on the test date shown above.

FAIL

This result is based on the minimum passing score recommended by USMLE for Step 3. Individual licensing authorities may accept the USMLE-recommended pass/fail result or may establish a different passing score for their own jurisdictions.

192

This score is determined by your overall performance on Step 3. For administrations between January 1, 2017 and December 31, 2017, the mean and standard deviation for first-time examinees from U.S. and Canadian medical schools were approximately 226 and 15, respectively, with most scores falling between 140 and 260. A score of 196 is recommended by USMLE to pass Step 3. The standard error of measurement (SEM)[‡] for this scale is approximately six points.

[§]Effective April 1, 2013, test results are reported on a three-digit scale only. Test results reported as passing represent an exam score of 75 or higher on a two-digit scoring scale.

[‡]Your score is influenced both by your general understanding of clinical medicine and by the specific set of items selected for this Step 3 examination. The Standard Error of Measurement (SEM) provides an index of the variation in scores that would be expected to occur if an examinee were tested repeatedly using different sets of items covering similar content.

INFORMATION PROVIDED FOR EXAMINEE USE ONLY

The Performance Profile below is provided solely for the benefit of the examinee.
These profiles are developed as assessment tools for examinees only and will not be reported or verified to any third party.

USMLE STEP 3 PERFORMANCE PROFILE

| | Lower Performance | Borderline Performance | Higher Performance |
|--|----------------------|---------------------------|-----------------------|
| EXAMINATION DAY 1 | | | |
| Foundations of Independent Practice | xxxxxxxxxx | | |
| EXAMINATION DAY 2 | | | |
| Advanced Clinical Medicine (MCQ) | | xxxxxxxxxxxxxx | |
| Advanced Clinical Medicine (CCS) | | xxxxxxxxxxxxxxxxxx | |
| PHYSICIAN TASK | | | |
| MK: Applying Foundational Science Concepts | | xxxxxxxxxxxxxxxxxx | |
| PC: Diagnosis | | xxxxxxxxxxxxxx | |
| PC: Health Maint & Disease Prevent/Pharmacotherapy | | xxxxxxxxxxxxxxxxxx | |
| PC: Clinical Interventions/Mixed Mgmt | | xxxxxxxxxxxxxxxxxx | |
| Systems-based Practice/Patient Safety & PBLI | | xxxxxxxxxxxxxx | |
| SYSTEM | | | |
| Immune/Blood & Lymph/Endocrine/Multisystem | | xxxxxxxxxxxxxxxxxx | |
| Bhv Health & Soc Sci: Comm Skills/Ethics/Pt Safety | | xxxxxxxxxxxxxxxxxx | |
| Nervous System & Special Senses | | xxxxxxxxxxxxxxxxxx | |
| Musculoskeletal Sys/Skin & Subcutaneous Tissue | | xxxxxxxxxxxxxxxxxx | |
| Cardiovascular System | | xxxxxxxxxxxxxxxxxx | |
| Respiratory System | *xxxxxxxxxxxxxx | | |
| Gastrointestinal System | | xxxxxxxxxxxxxxxxxx | |
| Renal/Urinary & Male/Female Sys & Pregnancy | | xxxxxxxxxxxxxxxxxx | |
| Biostatistics & Epidemiology/Population Health | | xxxxxxxxxxxxxx | |
| PATIENT AGE | | | |
| Pediatric (Birth–17 yrs) | | xxxxxxxxxxxxxxxxxx | |
| Young Adult/Middle-aged Adult (18–54 yrs) | | xxxxxxxxxxxxxx | |
| Older Adult (55–74 yrs) | | xxxxxxxxxxxxxx | |
| Elderly (Older than 74 yrs) | | xxxxxxxxxxxxxxxxxx | |

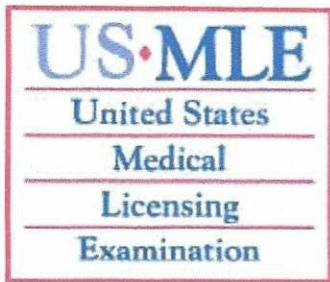
The above Performance Profile is provided to aid in self-assessment. The shaded area defines a borderline level of performance for each content area; borderline performance is comparable to HIGH FAIL / LOW PASS on the total test.

Performance bands indicate areas of relative strength and weakness. Some bands are wider than others. The width of a performance band reflects the precision of measurement: narrower bands indicate greater precision. The band width for a given content area is the same for all examinees. An asterisk indicates that your performance band extends beyond the displayed portion of the scale. Small differences in the location of bands should not be over interpreted. If two bands overlap, the performance in the associated areas should be interpreted as similar.

Descriptions of the topics covered in these content areas, as well as other topics covered on USMLE Step 3, can be found in the informational materials for USMLE Step 3 on the USMLE website (<http://www.usmle.org/step-3/#outlines>). With the exception of the Day 2 Advanced Clinical Medicine CCS profile, all profiles are based upon performance in the MCQ sections.

CCS—Computer-based Case Simulation; MCQ—Multiple-choice Question; MK—Medical Knowledge; PC—Patient Care; PBLI—Practice-based Learning and Improvement.

EXHIBIT B



United States Medical Licensing Examination®

Step 3 Score Report

FOR EXAMINEE USE ONLY. THIRD-PARTY USERS OF USMLE SCORES SHOULD RELY SOLELY ON OFFICIAL TRANSCRIPTS RECEIVED DIRECTLY FROM THE EXAMINEE'S USMLE REGISTRATION ENTITY.

NAME: Bowary, Paul
USMLE ID: 0-899-284-4

TEST DATE: December 28, 2018

Your Performance

Test Result

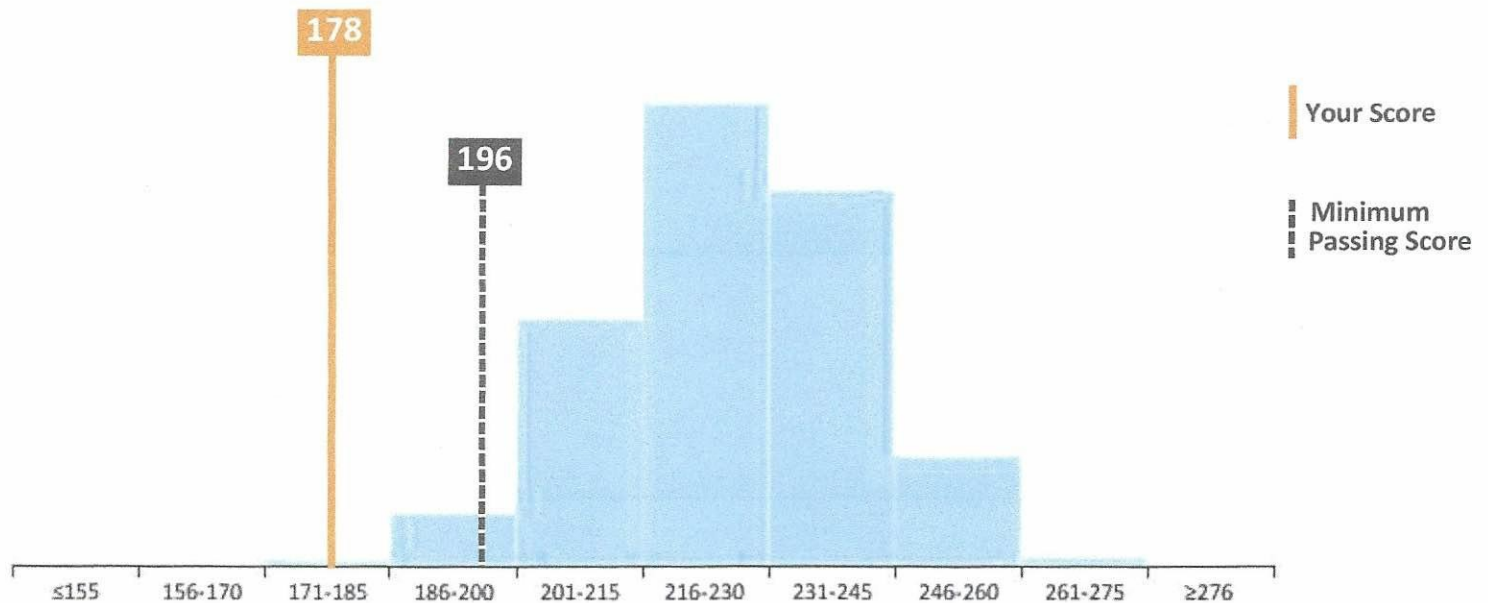
FAIL

Test Score

178

Your Performance Compared to Other Examinees

The chart below represents the distribution of scores for recent examinees from US and Canadian medical schools taking Step 3 for the first time. Reported scores range from 1-300 with a mean of 226 and a standard deviation of 15.



If you tested repeatedly under the same conditions on a different set of items covering the same content, without learning or forgetting, your score would fall within one standard error of the estimate (SEE) of your current score two-thirds of the time. The SEE on this exam is 8 points.

Your score +/- SEE: 170 – 186

United States Medical Licensing Examination

Step 3 Score Report

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NAME: Bowary, Paul

USMLE ID: 0-899-284-4

TEST DATE: December 28, 2018

Your Relative Strengths and Weaknesses

The boxes below indicate areas of relatively lower or higher performance in each content area within the Step 3 examination. A box in the "Higher" column indicates that your performance in that area was higher than your overall Step 3 performance shown on page 1. A box in the "Same" column indicates that your performance in that area was similar to or the same as your overall Step 3 performance. A box in the "Lower" column indicates that your performance in that area was lower than your overall Step 3 performance. The percentage range of items from each content area on the Step 3 examination is indicated below.

This information can be used to identify areas of strength and weakness to guide future study. Because the exam is highly integrative, USMLE recommends reviewing all content areas if retaking the test.

Performance by Physician Task Relative to Your Overall Step 3 Performance

| | (% Items Per Test) | Lower | Same | Higher |
|--|--------------------|-------|------|--------|
| PC: Diagnosis | (30 - 40%) | | | |
| PC: Health Maint & Disease Prevent/Pharmacotherapy | (14 - 22%) | | | |
| PC: Clinical Interventions/Mixed Mgmt | (12 - 20%) | | | |
| MK: Applying Foundational Science Concepts | (10 - 15%) | | | |
| Systems-based Practice/Patient Safety & PBLI | (10 - 15%) | | | |

Abbreviations: MK, Medical Knowledge; PC, Patient Care; PBLI, Practice-based Learning and Improvement.

Performance on Computer-based Case Simulations Relative to Your Overall Step 3 Performance

| | (# Cases Per Test) | Lower | Same | Higher |
|---|--------------------|-------|------|--------|
| Advanced Clinical Medicine: Computer-based Case Simulations | (13) | | | |

United States Medical Licensing Examination

Step 3 Score Report

FOR EXAMINEE USE ONLY. THIRD-PARTY USERS OF USMLE SCORES SHOULD RELY SOLELY
ON OFFICIAL TRANSCRIPTS RECEIVED DIRECTLY FROM THE EXAMINEE'S USMLE REGISTRATION ENTITY.

NAME: Bowary, Paul

USMLE ID: 0-899-284-4

TEST DATE: December 28, 2018

Performance by System Relative to Your Overall Step 3 Performance






| | (% Items Per Test) | Lower | Same | Higher |
|--|--------------------|-------|------|--------|
| Renal/Urinary & Male/Female Sys & Pregnancy | (12 - 16%) | | | |
| Bhv Health & Soc Sci: Comm Skills/Ethics/Pt Safety | (11 - 15%) | | | |
| Immune/Blood & Lymph/Endocrine/Multisystem | (11 - 15%) | | | |
| Biostatistics & Epidemiology/Population Health | (10 - 14%) | | | |
| Musculoskeletal Sys/Skin & Subcutaneous Tissue | (10 - 14%) | | | |
| Cardiovascular System | (8 - 12%) | | | |
| Nervous System & Special Senses | (7 - 11%) | | | |
| Respiratory System | (7 - 11%) | | | |
| Gastrointestinal System | (5 - 9%) | | | |

United States Medical Licensing Examination










Step 3 Score Report

Supplemental Information: Understanding the Content Areas

The information below is a visual representation of the content weighting on this examination that may be informative in guiding remediation. Descriptions of the topics covered in these content areas, as well as other topics covered on USMLE Step 3, can be found in the information materials on the USMLE website (<https://www.usmle.org>). Please use the contact form on the USMLE website (<https://www.usmle.org/contact/>) if you have additional questions.

| Physician Task | (% Items Per Test) | |
|--|--------------------|---|
| PC: Diagnosis | (30 - 40%) |  |
| PC: Health Maint & Disease Prevent/Pharmacotherapy | (14 - 22%) |  |
| PC: Clinical Interventions/Mixed Mgmt | (12 - 20%) |  |
| MK: Applying Foundational Science Concepts | (10 - 15%) |  |
| Systems-based Practice/Patient Safety & PBLI | (10 - 15%) |  |

Abbreviations: MK, Medical Knowledge; PC, Patient Care; PBLI, Practice-based Learning and Improvement.

| System | (% Items Per Test) | |
|--|--------------------|---|
| Renal/Urinary & Male/Female Sys & Pregnancy | (12 - 16%) |  |
| Bhv Health & Soc Sci: Comm Skills/Ethics/Pt Safety | (11 - 15%) |  |
| Immune/Blood & Lymph/Endocrine/Multisystem | (11 - 15%) |  |
| Biostatistics & Epidemiology/Population Health | (10 - 14%) |  |
| Musculoskeletal Sys/Skin & Subcutaneous Tissue | (10 - 14%) |  |
| Cardiovascular System | (8 - 12%) |  |
| Nervous System & Special Senses | (7 - 11%) |  |
| Respiratory System | (7 - 11%) |  |
| Gastrointestinal System | (5 - 9%) |  |